

TABLE E-1 Outcome Probabilities and Literature References*

Description (Tree Code)	Probability	Range	References
Chance for having a non-arthritic hip given a high risk for early osteoarthritis (HighRiskEarlyOA)	0.60	0.4 to 0.8	25, 30, 34, 72
Chance for having a non-arthritic hip given a low risk for early osteoarthritis (LowRiskEarlyOA)	0.93		30
Chance for having a non-arthritic hip given a normal risk for early osteoarthritis (Normal)	0.96		2, 32, 33
Probability an individual infant will have DDH (pDDH)	0.025		63
Probability of acetabular dysplasia given diagnosis of DDH (pDYSPLASTIChipsDDH)	0.6	0.33 to 0.82	38, 39, 50, 66, 73
Probability a hip that is dislocated or subluxated resolves on its own without treatment (pRESOVENoTx)	0.22	0.1 to 0.25	40, 74
Probability that “dysplasia” diagnosis (or hip immaturity) resolves on its own (Pdysresolves)	0.9048		12, 38
Probability a hip becomes normal when given no treatment for initial acetabular dysplasia (pNORMnoTx)	0.80	0.5 to 0.95	29, 38, 73
Probability of residual dysplasia given no treatment (pDYSNoTx)	0.39		40
Probability of a good outcome given persistent DDH (pGOODpersistDDH)	0.41		25, 34
Probability that a person with some persistent dysplasia is at high risk for osteoarthritis (pRISKOAPERSTDYS)	0.5	0.22 to 1.0	24, 29, 30, 34, 35
Probability normal hips given treatment with Pavlik harness for acetabular dysplasia (pNORMTx)	0.99		42
Probability of a good outcome given residual dysplasia in hips treated successfully in Pavlik harness (pGOODDYSSUCCESSTx)	0.86	0.75 to 0.86	21, 29
Probability of having AVN given treatment for acetabular dysplasia with a Pavlik harness (pAVNTx)	0.01	0 to 0.01	22, 42, 49
Probability dislocated hip reduces successfully in Pavlik (pDISnormTx)	0.84	0.83 to 0.99	8, 9, 41-44, 46, 47, 52
Probability of residual dysplasia despite successful treatment in Pavlik (pDYSSUCCESSTx)	0.05	0 to 0.115	22, 42, 44, 46-49, 51, 52
Probability of having AVN in dislocated or subluxated hips that fail to reduce in Pavlik and need surgery (pAVNfailpavlik)	0.03	0.03 to 0.52	42, 54

Probability of having AVN in dislocated or subluxated hips that successfully reduce in Pavlik (pAVNSuccessTx)	0.02	0.01 to 0.123	8, 29, 42-44, 46, 47
Probability of a good outcome given no further surgery necessary given successful Pavlik treatment (probGOODnosurgSuccessTx)	0.97	0.93 to 0.98	21, 48
Probability of a good outcome given failure of Pavlik and surgery performed (pGOODFail)	0.83	0.46 to 0.83	21, 30, 55
Probability of a good result in hips that fail to reduce in Pavlik and get AVN from surgical treatment (pGOODFailAVN)	0.5	0.46 to 0.5	21, 29
Probability of a good outcome despite AVN in successfully treated hip (pGOODAVNSuccessTx)	0.56	0.5 to 0.56	29, 54
Probability a hip is dislocated or subluxated when universal screening is utilized with both PE+US (pdisUSPEscreen)	0.0246		12
Probability a hip is dislocated given “normal” result using PE+US screening (pDISnormPEUS)	0.0003		12
Probability of acetabular dysplasia given “normal” result PE+US screening (pDYSnormPEUS)	0.0013		12, 36
Probability of “dysplasia” result when screened with PE + US (pdysPEUSscreen)	0.1395		12
Probability a hip is dislocated or subluxated when US is utilized for patients determined to be at high risk for DDH in PE+sUS screening (pdisUS_PEsUS)	0.149		12
Probability a hip is dislocated or subluxated when DDH is missed in PE+sUS screening (pDISmissedDDHPEsUS)	0.5		12, 36
Probability a hip is dislocated or subluxated given normal ultrasound in PE+sUS screening (pDISnormUS_PEsUS)	0		12
Probability of dysplasia given “normal” ultrasound in those screened with PE+sUS (pDYSnormUS_PEsUS)	0.0085		12
Probability the diagnosis of DDH is missed when PE only is utilized in PEsUS screening (pmissedDDHPEsUS)	0.00065		12, 36
Probability “normal” result when screened with PE+sUS (pnormPEsUSscreen)	0.882		12
Probability “normal” US result when US is done for positive risk factors in PE+sUS screening (pnormUS_PEsUS)	0.678		12

Probability dysplasia resolves untreated when positive US for patient with risk factors for DDH using PE+sUS screening (pRESOLVESPEsUS)	0.844		12
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*The identifying tree code, associated description, probability, and literature references used in the decision tree in Figure 3. OA = osteoarthritis, AVN = avascular necrosis, DDH = developmental dysplasia of the hip, PE = physical examination screening for hip dysplasia, US = ultrasonographic screening for hip dysplasia, and sUS = selective use of ultrasound screening for hip dysplasia.